

ABSTRACT OF THE DISCLOSURE

A solid electrolyte battery having improved energy density and safety, the solid electrolyte battery incorporating a positive electrode; a negative electrode disposed opposite to the positive electrode; a separator disposed between the positive electrode and the negative electrode; and solid electrolytes each of which is disposed between the positive electrode and the separator and between the separator and the negative electrode, wherein the separator is constituted by a polyolefin[e] porous film, the polyolefin[e] porous film has a thickness satisfying a range not [smaller]greater than 5[μ] δmm nor [larger]greater than 15[μ] δmm and a [vacancy]volume [ratio]porosity satisfying a range not [lower]less than 25 % nor [higher]greater than 60 %, and the impedance in the solid electrolyte battery is [higher]greater than the impedance realized at the room temperature when the temperature of the solid electrolyte battery satisfies a range not [lower]less than 100[°] δEC nor [higher]greater than 160[°C] δC.